

# PATENT ABSTRACTS OF JAPAN

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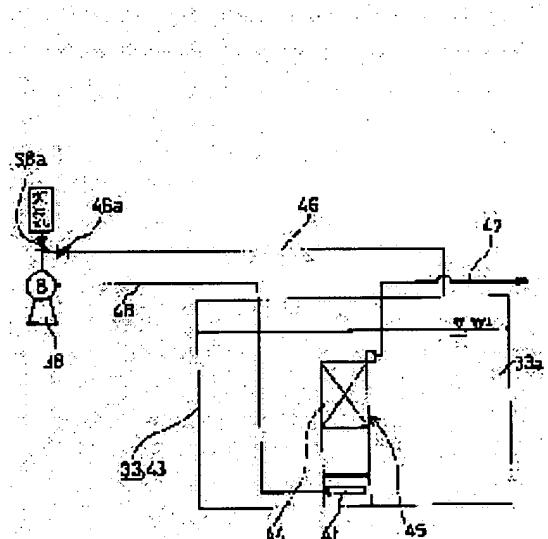
**KUBOTA CORP  
TAKESHITA OSAMU  
NISHIOKA YOICHI  
AKITA JUNJI**

**(54) WATER TREATING DEVICE**

(57) Abstract:

**PROBLEM TO BE SOLVED:** To realize an anaerobic state while aeration strength required for membrane surface washing is secured, by providing a circulation means for feeding waste gas to a diffusing means in circulation, and performing membrane-separation for water to be treated under such an anaerobic state that the gas for washing a membrane surface, containing the waste gas, is ejected from the diffusing means.

**SOLUTION:** A membrane separation tank 33 is provided with a membrane separation device 45 having membrane cartridges 44 arrayed in a closed type tank 43. The membrane separation device 45 is provided with a transmission water pipe 47 communicated with a transmission water flow path of the membrane cartridge 44 and also a diffusing pipe 41 is provided in the lower part of the membrane cartridge 44, and the diffusing pipe 41 is communicated with the discharge side of a blower 38 through an air feeding pipe 48. The waste gas stored in the upper space of the tank is fed to the suction side of the blower 38 through a suction pipe 46 and the water to be treated is subjected to membrane-separation treatment under such an anaerobic state that the gas for washing a membrane surface, containing the waste gas, is ejected from the diffusing pipe 41, at need. Thus, while the aeration strength required for the membrane surface washing is secured, an anaerobic state is realized.



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